27 August 1951

Joshua Lederberg

WFL has just had a chance to read a copy of Joshua Lederberg's terminal report on his three-year project on the Genetics of Bacteria, May 1, 1948 - April 30, 1951. In his covering letter he briefly explores the possibility of continued aid for his work, asking specifically for one or two years' support for Dr. F. D. Skaar (previously with Sonneborn). As the three-year limitation of the grant in aid mechanism is now over with in L's case, the possibility of a Trustee action for the support of his work arises. Such possible action probably should follow:

1. A review of his last three years' work.

2. Receipt of a formal description of his projected future work.

3. A visit to his laboratory in Wisconsin.

In reviewing L's report of his last three years' grant in aid, there is a general tone of maturity and competence that is quite striking in a worker who was rather well known for his immaturity and brashness a few years ago. L has now become, apparently, one of the world's experts on bacterial genetics, giving the talk on this subject at the Cold Spring Harbor Symposium this year. In his report he mentions such interesting findings as the routine production of bacterial hybrids, the extension of his work from E. coli to the paratyphoid group, as well as studies on the coli phage and the elusive "L. forms" of coli that are filterable in size. All in all, L has produced some thirteen papers in recognized journals during the last three-year period and may be considered to have put the occurrence of "sex" in bacteria on a completely firm scientific basis that is beyond question today. It should be remarked of course that usually the word "sex" connotes a male and a female, one of which does not produce any progeny. In bacteria, this of course is not the case, as both cells continue to divide by fission, but from a genetic point of view the same purpose is answered as in higher animals, as nucleoprotein (gene) reshuffling and sorting out have taken place with the consequent production of differing progeny (often better able to adapt to the environment), quite apart from any mutation mechanism that may exist.

To have done all of this in three years and with a total RF investment of $7,500 would seem to be one of the best experiences to date of the grant in aid program. Now that the three-year trial period is over, it would seem that L is a genuinely original scientist of high capacity and genuine dedication. Before a Trustee action should be initiated, however, various opinions of men such as Beadle, Muller, Demerec, Davis, etc., should be collected, and if these opinions confirm the above point of view, perhaps a three-year Trustee action of $15,000 - $20,000 might well be in order.